

Cross Section Codes

Multiple sources of cross sectional data are available for input to the dambreak model. The source of this data should be noted as follows:

'Xsec_type' is a two-character field. The first character describes the general 'class' and the second character will describe the precise method. For example, the code 'G3' indicates GIS extraction from 10 meter data.

GIS Extraction

Uses a GIS application to lay transect and extract cross section information.

- G1** 90-meter data (not recommended)
- G2** 30-meter data
- G3** 10-meter data (maximum recommended cell size for accurate cross sectional information.
- G4** 1-meter data
- G5**
- ... { future uses}
- G9**

Manual Extraction

Uses a ruler, and paper map and extract cross sectional information. Coarser data should use a higher number.

- M1** 7 ½ minute quad
- M2** 30 x 60 minute quads (such as BLM land-use maps)
- M3**
- ... {future}
- M9**

Field Survey

Uses surveying equipment (operated by trained personnel) to determine the cross section.

- S1** Direct/EDM Leveling
- S2** Theodolite or Stadia Survey (non-Total Station).
- S3** Resource* Grade GPS Survey.
- S4** Survey* Grade GPS Survey.
- S5**
- ... {future/other Survey types.}
- S9**

*Resource Grade is considered to have accuracy <5 meter. Survey Grade has accuracy <1 meter (Trimble 4800™ is accurate to 5-20 mm).

Parabolic Formula

Uses the parabolic formula based on the dimensions of the dam, to develop channel cross sections.

P1 Parabolic Method 1 (Office of Hydrology).

P2

... {Future/other Parabolic relationships}

P9

Prismoidal

Uses a prismoidal relationship based on the dimensions of the dam and the estimated flood stage to develop channel cross sections.

R1 Prismoidal method 1 (CBRFC).

R2

... {future/other prismoidal relationships}

R9